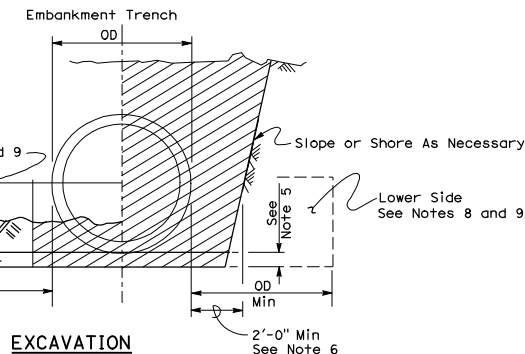
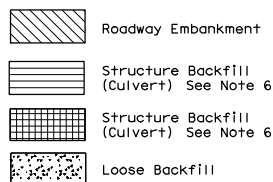


BACKFILL



EXCAVATION



TYPE 1 INSTALLATION:

The haunch and outer bedding shall be compacted to a minimum 90 percent relative compaction. In addition, the minimum sand equivalent in these areas shall be 30 and the maximum percentage passing the 75 μ m sieve size shall be 12.

TYPE 2 INSTALLATION:

The haunch and outer bedding shall be compacted to a minimum 90 percent relative compaction. In addition, the minimum sand equivalent in these areas shall be 25.

TYPE 3 INSTALLATION:

The haunch and outer bedding shall be compacted to a minimum 85 percent relative compaction. 90 percent relative compaction will be required where the fill over the pipe is less than 4'-0" or $\frac{1}{2}$ OD.

INSTALLATION TYPE 1

MINIMUM CLASS AND D-LOAD	COVER	
	108" Dia AND SMALLER	OVER 108" Dia
Class II 1000D	14.9'	12.9'
Class III 1350D	15.0' - 20.9'	13.0' - 18.9'
Class III Special 1700D	21.0' - 26.9'	19.0' - 24.9'
Class IV 2000D	27.0' - 31.9'	25.0' - 29.9'
Class IV Special 2500D	32.0' - 40.9'	30.0' - 38.9'
Class V 3000D	41.0' - 49.9'	39.0' - 46.9'
Class V Special 3600D	50.0' - 59.0'	47.0' - 58.0'

INSTALLATION TYPE 2

MINIMUM CLASS AND D-LOAD	COVER
Class II 1000D	9.9'
Class III 1350D	10.0' - 14.9'
Class III Special 1700D	15.0' - 19.9'
Class IV 2000D	20.0' - 24.9'
Class IV Special 2500D	25.0' - 31.9'
Class V 3000D	32.0' - 38.9'
Class V Special 3600D	39.0' - 47.0'

INSTALLATION TYPE 3

MINIMUM CLASS AND D-LOAD	COVER	
	48" Dia AND SMALLER	OVER 48" Dia
Class II 1000D	7.9'	5.9'
Class III 1350D	8.0' - 10.9'	6.0' - 8.9'
Class III Special 1700D	11.0' - 14.9'	9.0' - 12.9'
Class IV 2000D	15.0' - 17.9'	13.0' - 15.9'
Class IV Special 2500D	18.0' - 21.9'	16.0' - 19.9'
Class V 3000D	22.0' - 26.9'	20.0' - 24.9'
Class V Special 3600D	30.0' - 33.0'	25.0' - 31.0'

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
November 17, 2006 PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

To accompany plans dated _____

NOTES:

- Unless otherwise shown on the plans or specified in the special provision, the Contractor shall have the option of selecting the class of RCP and the type of installation to be used, provided the height of cover does not exceed the value shown for the RCP selected.
Example: 24" RCP culvert with maximum cover of 19'-0" the options are:
a) Class III or stronger with Installation Type 1.
b) Class III Special or stronger with Installation Type 2.
c) Class IV Special or stronger with Installation Type 3.
Cover is defined as the maximum vertical distance from top of the pipe to finished grade within the length of any given culvert.
- The class of RCP and Installation Type selected shall be the same throughout the length of any given culvert.
- The "length of any culvert" is defined as the culvert between:
a) Successive drainage structure (Inlets, junction boxes, headwalls, etc.).
b) A drainage structure and the inlet or outlet end of the culvert.
c) The inlet and outlet end of the culvert when there are no intervening drainage structures.
- Oval and arch shaped RCP shall not be used.
- $\frac{1}{2}$ OD Min, not less than 3".
- Slurry cement backfill may be substituted for backfill in the outer bedding and haunch areas. If slurry is used the outer and middle beddings shall be omitted. Prior to installation the soil under the middle $\frac{1}{3}$ of the outside diameter of the pipe shall be softened by scarifying or other means to a minimum depth of $\frac{1}{2}$ OD, but not less than 3". Where slurry cement backfill is used clear distance to trench wall may be reduced as set forth in Section 19-3.062 of the Standard Specifications.
- Backfill shall be placed full width of excavation except where dimensions are shown for backfill width or thickness. Dimensions shown are minimums.
- Lower side shall be suitable material as determined by the Engineer. Otherwise it shall be considered unsuitable as set forth in Section 19-2.02 of the Standard Specifications. See Note 9.
- Where the pipe is placed in a trench, if the trench walls are sloped at 5 vertical to 1 horizontal or steeper for at least 90 percent of the trench height or up to not less than 12" from the grading plane, the firmness of the soil in the lower side need not be considered.
- Non-reinforced precast concrete pipe sizes 3'-0" or smaller may be placed under installation Types 1, 2 or 3.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

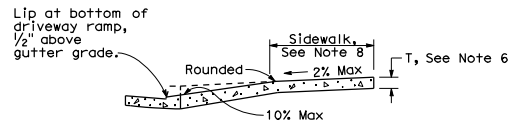
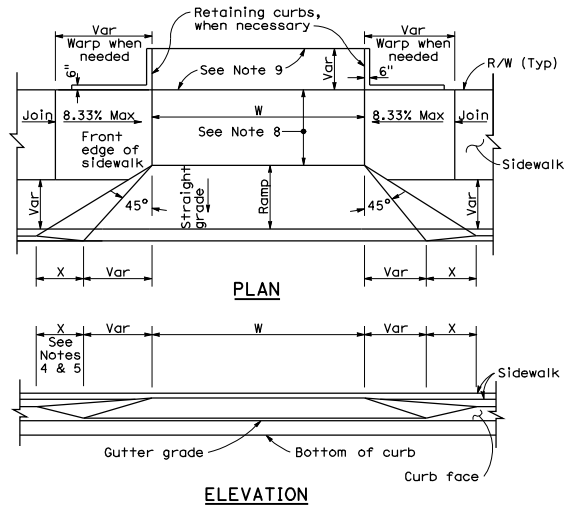
EXCAVATION AND BACKFILL CONCRETE PIPE CULVERTS

NO SCALE

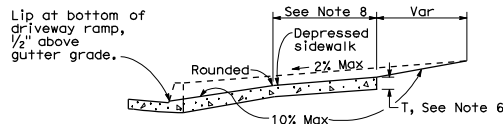
RSP A62DA DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN A62DA
DATED MAY 1, 2006 - PAGE 20 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A62DA

2006 REVISED STANDARD PLAN RSP A62DA



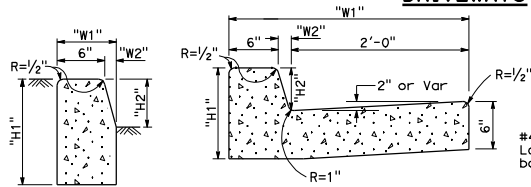
CASE A
Typical driveway, sidewalk not depressed



CASE B
Driveway with depressed sidewalk

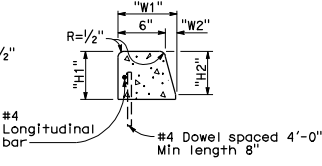
SECTIONS

DRIVEWAYS



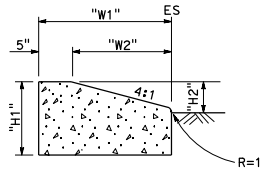
TYPE A1 CURBS
See Table A

TYPE A2 CURBS
See Table A

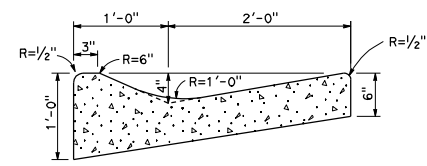


TYPE A3 CURBS

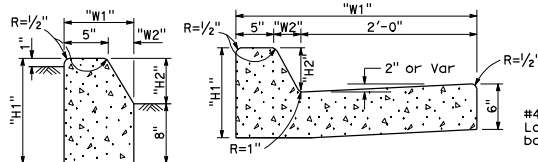
Superimposed on existing pavement
See Table A



TYPE D CURBS
See Table A

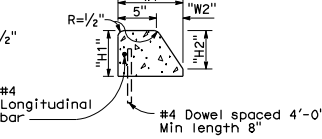


TYPE E CURB



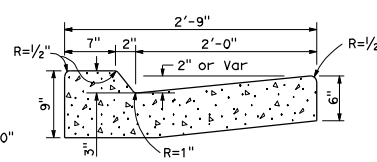
TYPE B1 CURBS
See Table A

TYPE B2 CURBS
See Table A

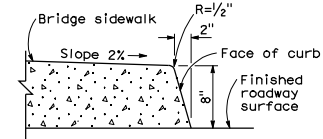


TYPE B3 CURBS

Superimposed on existing pavement
See Table A



TYPE B4 CURBS



TYPE H CURB
On Bridges

NOTES:

1. Case A driveway section typically applies.
2. Use Case B driveway section when ramp slopes would exceed 10% in Case A.
3. Use Case B driveway section when sidewalk cross slope would exceed 2% in Case A.
4. $X=3'-0"$ except for curb heights over 10" where 4:1 slopes shall be used on curb slope.

5. X is a variable when sidewalk is located where wheelchairs may traverse the surface. Slopes shall not exceed 8.33%.
6. Sidewalk and ramp thickness "T" at driveway shall be 4" for residential and 6" for commercial.
7. Difference in slope of the driveway ramp and the slope of a line between the gutter and a point on the roadway 5'-0" from gutter line shall not exceed 15%. Reduce driveway ramp slope, not gutter slope, where required.

CURBS

8. Minimum width of clear passageway for sidewalk shall be 4'-0".
9. Retaining curbs and acquisition of construction easement may be necessary for narrow sidewalks or curb heights in excess of 6".
10. Across the pedestrian route at curb ramp locations, the gutter pan slope shall not exceed 1" of depth for each 2'-0" of width.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER

November 17, 2006

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Michael Janzen
No. 44788
Exp. 03-31-08
CIVIL
STATE OF CALIFORNIA

To accompany plans dated _____

CURB QUANTITIES

TYPE	CUBIC YARDS PER LINEAR FOOT
A1-6	0.02585
A1-8	0.03084
A2-6	0.05903
A2-8	0.06379
A3-6	0.01036
A3-8	0.01435
B1-4	0.02185
B1-6	0.02930
B2-4	0.05515
B2-6	0.06171
B3-4	0.00641
B3-6	0.01074
B4	0.05709
D-4	0.04083
D-6	0.06804
E	0.06661

TABLE A

CURB TYPE	DIMENSIONS			
	"H1"	"H2"	"W1"	"W2"
A1-6	1'-2"	6"	7 1/2"	1 1/2"
A1-8	1'-4"	8"	8"	2"
A2-6	1'-0"	6"	2'-7 1/2"	1 1/2"
A2-8	1'-2"	8"	2'-8"	2"
A3-6	6"	5"	7 1/4"	1 1/4"
A3-8	8"	7"	7 3/4"	1 3/4"
B1-4	1'-0"	4"	7 1/2"	2 1/2"
B1-6	1'-2"	6"	9"	4"
B2-4	10"	4"	2'-7 1/2"	2 1/2"
B2-6	1'-0"	6"	2'-9"	4"
B3-4	4"	3"	7"	2"
B3-6	6"	5"	8 1/2"	3 1/2"
D-4	10"	4"	1'-6"	1'-1"
D-6	1'-0"	6"	2'-2"	1'-8"

CURBS AND DRIVEWAYS

NO SCALE

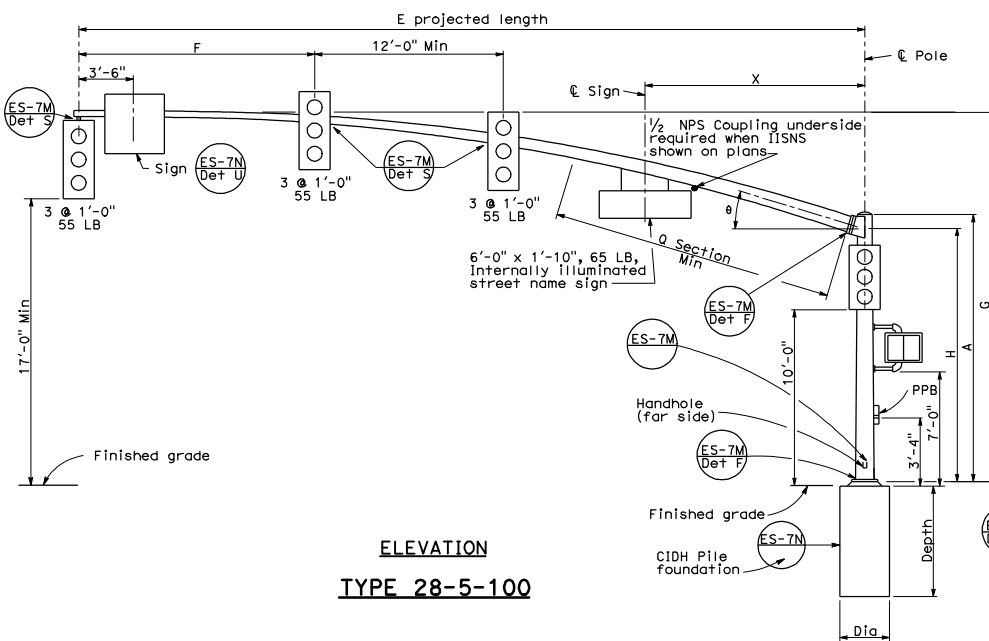
RSP A87A DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN A87A DATED MAY 1, 2006 - PAGE 113 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP A87A

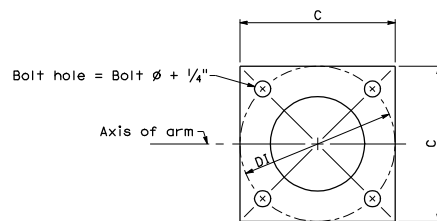
DIST	COUNTY	ROUTE	POST MILES	SHEET	TOTAL
			TOTAL PROJECT	NO.	SHEETS

November 17, 2006
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.
 To accompany plans dated _____

REGISTERED PROFESSIONAL ENGINEER
 Stanley P. Johnson
 No. C57793
 Exp. 03-31-08
 CIVIL
 STATE OF CALIFORNIA



LUMINAIRE ARM DATA					
M Projected Length	N Rise	Min OD at Pole	Thickness	P Mounting Height 30'-0" Pole	35'-0" Pole
6'-0"	2'-0"	3/4"	0.1196"	31'-6"	36'-6"
8'-0"	2'-6"	3/2"		32'-0"	37'-0"
10'-0"	3'-3"	3/8"		32'-9"	37'-9"
12'-0"	4'-3"	3/8"		33'-9"	38'-9"
15'-0"	4'-9"	4/4"		34'-3"	39'-3"

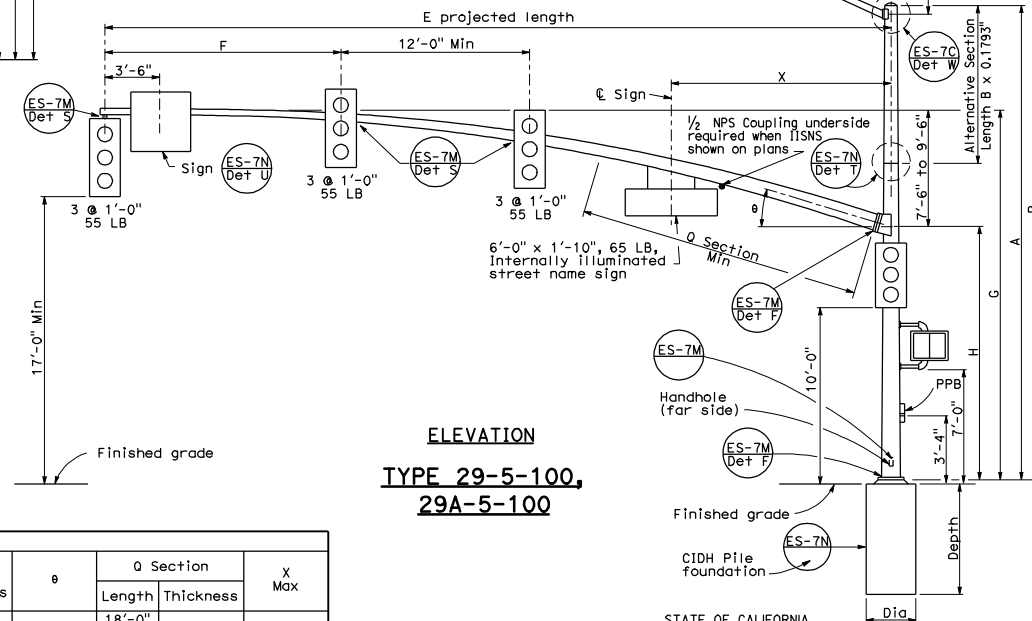


SIGNAL ARM DATA														
E Projected Length	F Min Spacing	G Mounting Height	H	Min OD at Pole	Thickness	I Bolt Circle	HS Cap Screws	J Plate Size	K Arm \varnothing Thickness	L Pole \varnothing Thickness	θ	Q Section	X Max	
												Length	Thickness	
50'-0"	15'-0"	23'-7 1/2" to 25'-7 1/2"	16'-0"	11 1/8"	0.1793"	16"	1 1/2"-6NC-3/4"	1'-4"	1 3/4"	1 3/4"	15°	18'-0"	0.2391"	14'-0"
55'-0"				1'-1/4"								23'-0"		

POLE DATA				BASE PLATE DATA				LUMINAIRE DATA			
Pole Type	Load Case	Wind Velocity mph	A Height	Min OD Base	Thickness	Alternative Section B Length	Bottom Top	C	DI Bolt Circle	Thickness	Anchor Bolts Size
28-5-100	5	100	17'-0"	14"	0.3125"	None	10'-0"	21"	21"	1 3/4"	2" Ø x 42" x 6"
29-5-100			30'-0"	14"		11'-0"	9 1/8"	21"	21"	1 3/4"	2" Ø x 42" x 6"
29A-5-100			35'-0"	14"		15'-0"	9 1/8"	23"	23"	1 3/4"	2" Ø x 42" x 6"

□ Indicates arm length to be used unless otherwise noted on plans.

ELEVATION
SIGNAL ARM CONNECTION DETAILS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD
CASE 5 ARM LOADING
WIND VELOCITY=100 MPH
ARM LENGTHS 50' TO 55')

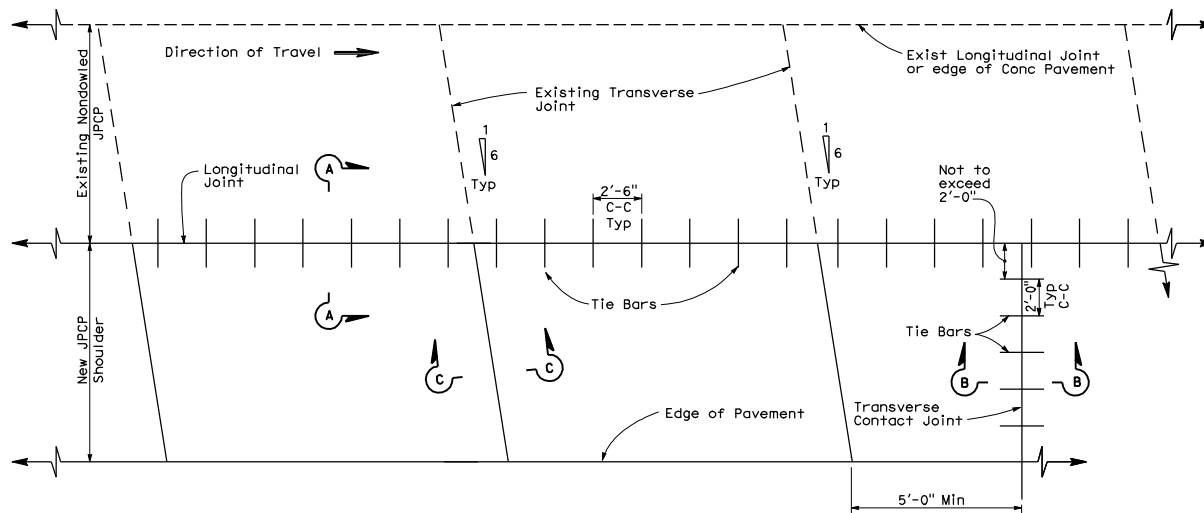
NO SCALE
RSP ES-7G DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN ES-7G
DATED MAY 1, 2006 - PAGE 443 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-7G

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 November 17, 2006
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated _____



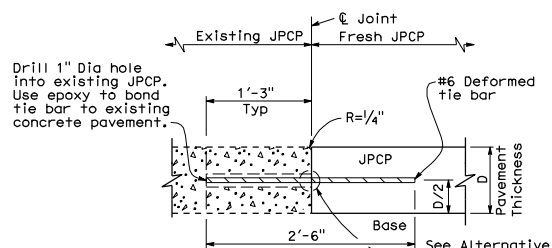
PLAN

NOTES:

1. New transverse weakened plane joints shall match the skewed offset and spacing of the adjacent existing weakened plane joints, as shown.
2. Transverse contact joints, with tie bars spaced as shown, shall be installed at the end of paving operations. Transverse contact joints shall be placed at least 5'-0" from any weakened plane joint.
3. This Standard Plan only applicable for constructing a nondoweled JPCP shoulder next to existing nondoweled JPCP lane.

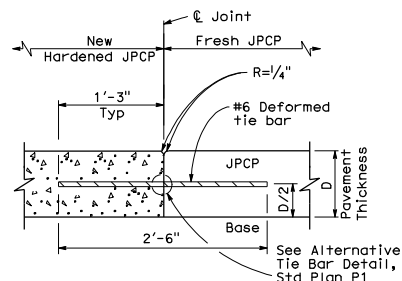
TABLE A

Tie Bar Spacing		
Panel Length	Total Tie Bars per Slab	Clearance Tie Bar to Transverse Joint
9'-0"	3	1'-3"
9'-6"	3	1'-4 1/2"
12'-0"	5	1'-4"
13'-0"	5	1'-10"
14'-0"	5	2'-3 3/4"
15'-0"	6	1'-8"



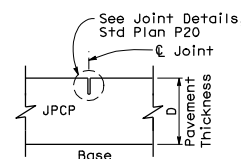
SECTION A-A

LONGITUDINAL JOINT
(Between fresh and hardened concrete)



SECTION B-B

TRANSVERSE CONTACT JOINT



SECTION C-C

TRANSVERSE WEAKENED
PLANE JOINT

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**JOINTED PLAIN CONCRETE
PAVEMENT-NONDOWELED SHOULDER
ADDITION/RECONSTRUCTION**

NO SCALE

RSP P3 DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN P3
DATED MAY 1, 2006 - PAGE 121 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
------	--------	-------	--------------------------	-----------	--------------

William K. Farnbach
 REGISTERED CIVIL ENGINEER
 No. C-49042
 November 17, 2006
 PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER

William K. Farnbach

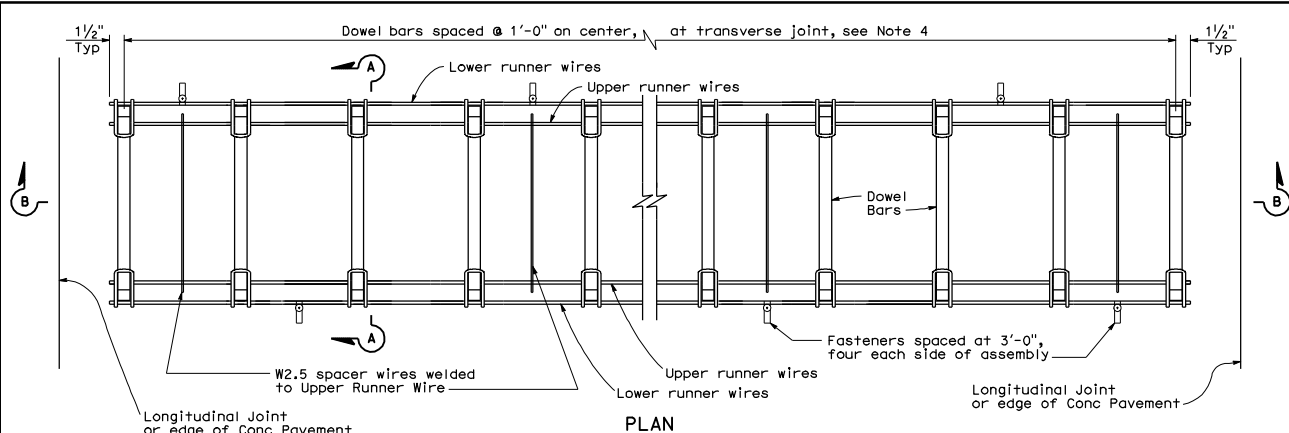
No. C-49042

Exp. 9-30-08

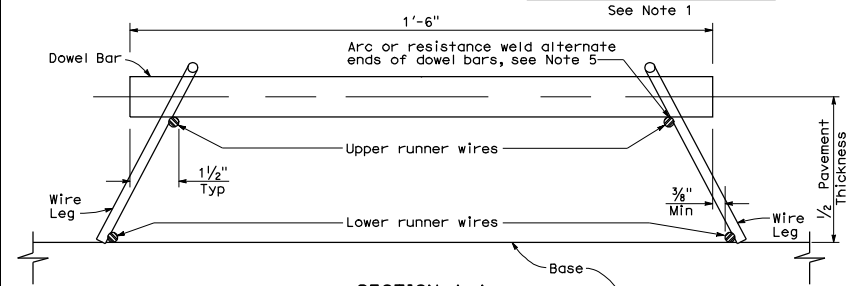
CIVIL

STATE OF CALIFORNIA

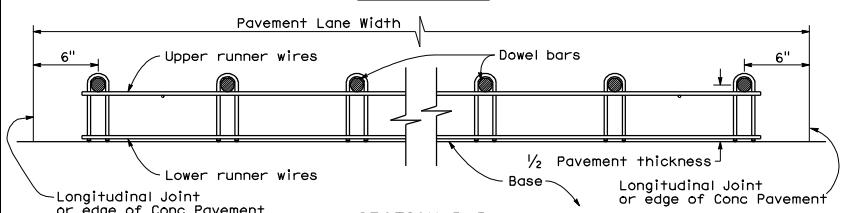
To accompany plans dated _____



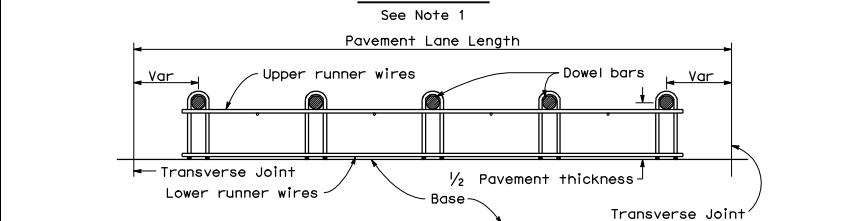
PLAN
DOWEL BAR BASKET
(TRANSVERSE JOINT)
 See Note 1



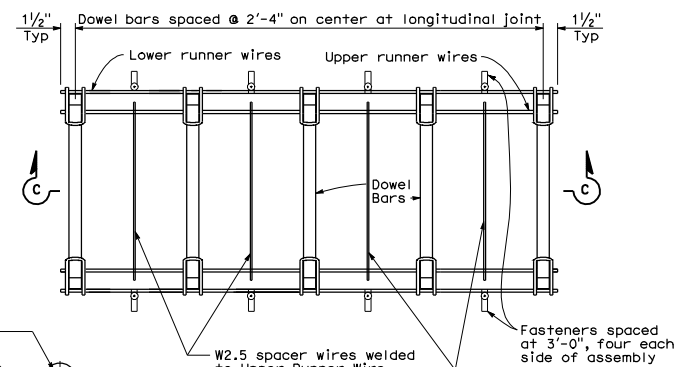
SECTION A-A



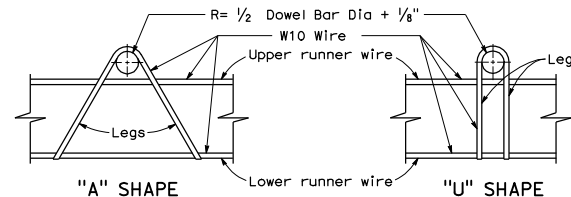
SECTION B-B
 See Note 1



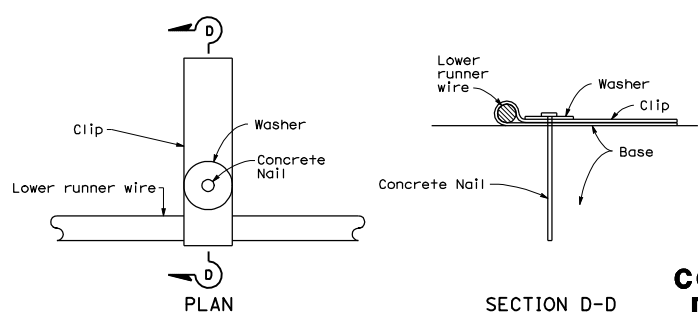
SECTION C-C
 See Notes 1 and 4



PLAN
DOWEL BAR BASKET
(LONGITUDINAL JOINT)
 See Note 1



ASSEMBLY FRAME DETAILS



FASTENER DETAIL

SECTION D-D

- NOTES:**
- "U" frame shape assembly shown. "U" frame shape or "A" frame shape are acceptable.
 - Wire sizes shown are minimum required.
 - All wire intersections are to be resistance welded.
 - Use tie bar spacing for longitudinal dowel bar locations. See Std Plans P1 and P2, and Revised Std Plan RSP P3 for tie bar requirements.
 - Weld may be at top or bottom of dowel bar.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT-
 DOWEL BAR BASKET
 DETAILS**

NO SCALE

RSP P12 DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN P12
 DATED MAY 1, 2006 - PAGE 125 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P12

2006 REVISED STANDARD PLAN RSP P12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
------	--------	-------	-----------------------------	--------------	-----------------

William K. Farnbach
REGISTERED CIVIL ENGINEER

November 17, 2006
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER

William K. Farnbach

No. C-49042

Exp. 9-30-08

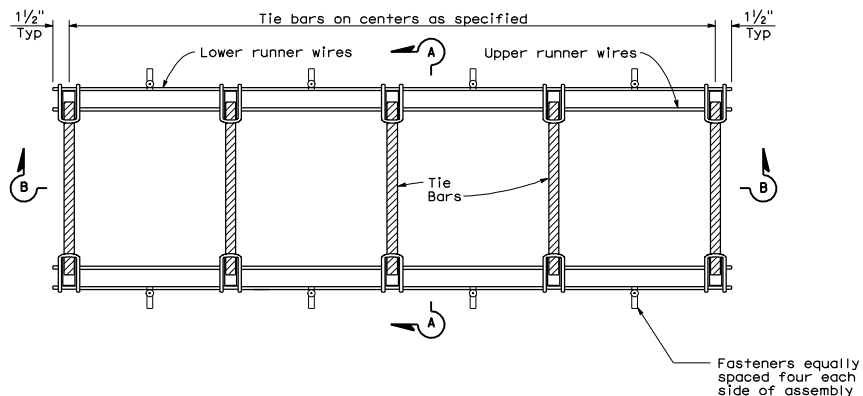
CIVIL

STATE OF CALIFORNIA

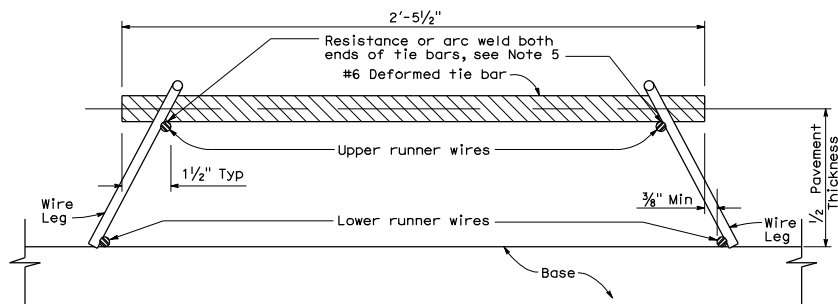
To accompany plans dated _____

NOTES:

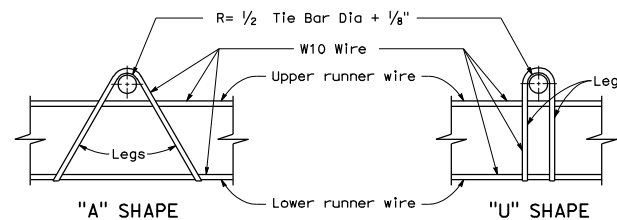
- "U" frame shape assembly shown. "U" frame shape or "A" frame shape are acceptable.
- Wire sizes shown are minimum required.
- All wire intersections are to be resistance welded.
- Not for use on nondoweled skewed jointed plain concrete pavement.
- Weld may be at top or bottom of tie bar.



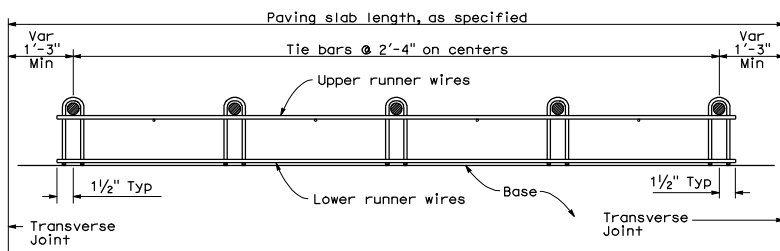
PLAN
TIE BAR BASKET
(TIE BARS AT LONGITUDINAL JOINT)
See Note 1



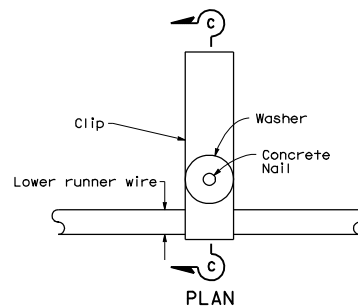
SECTION A-A



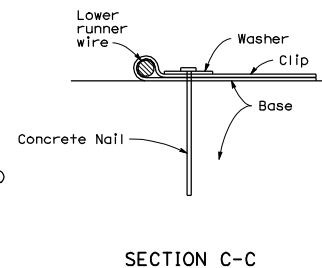
ASSEMBLY FRAME DETAILS



SECTION B-B
See Note 1



FASTENER DETAIL



SECTION C-C

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**CONCRETE PAVEMENT-
TIE BAR BASKET
DETAILS**
NO SCALE

RSP P17 DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN P17
DATED MAY 1, 2006 - PAGE 126 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P17

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
------	--------	-------	-----------------------------	--------------	-----------------

William K. Farnbach
REGISTERED CIVIL ENGINEER

November 17, 2006
PLANS APPROVAL DATE

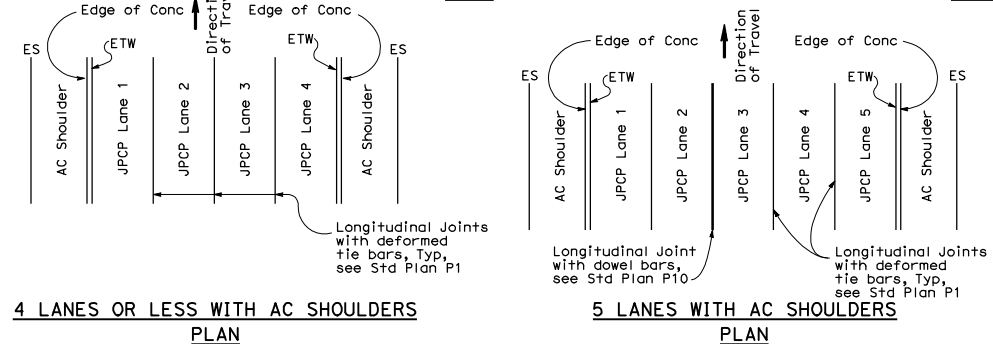
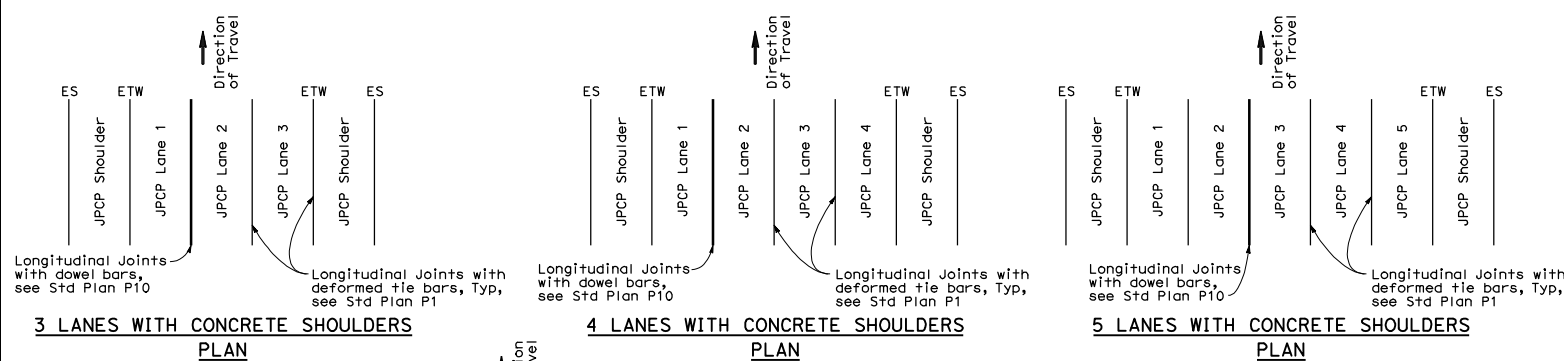
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER

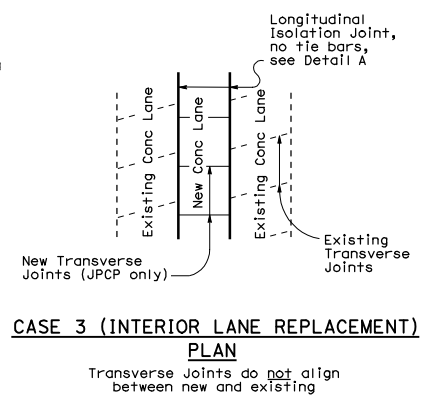
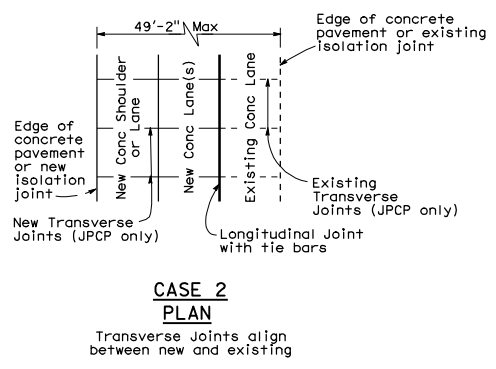
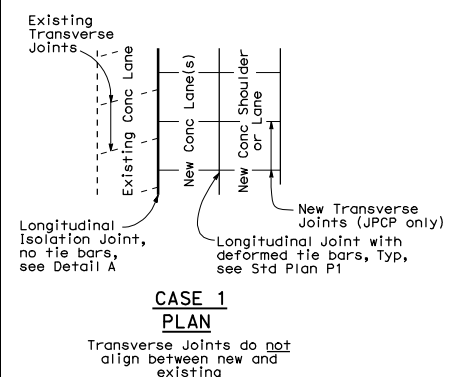
William K. Farnbach
No. C-49042
Exp. 9-30-08
CIVIL
STATE OF CALIFORNIA

To accompany plans dated _____

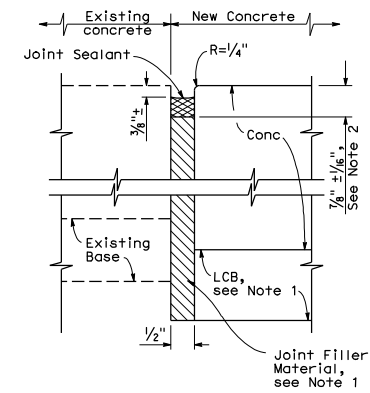
- NOTES:**
- Where Lean Concrete Base is not used as base material, the joint filler material used for the longitudinal isolation joint shall only extend to the bottom of the new concrete slab. See Detail A.
 - Use $\frac{3}{16}$ " $\pm \frac{1}{16}$ " dimension for silicone sealant.
 - See Standard Plan P10 for longitudinal joint with dowel bars.



NEW CONSTRUCTION
Location of Longitudinal Joints
Jointed Plain Concrete Pavement only



LANE/SHOULDER ADDITION OR RECONSTRUCTION
For JPCP and CRCP



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**CONCRETE PAVEMENT-
LANE SCHEMATICS
AND ISOLATION JOINT DETAIL**

NO SCALE

RSP P18 DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN P18
DATED MAY 1, 2006 - PAGE 127 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP P18

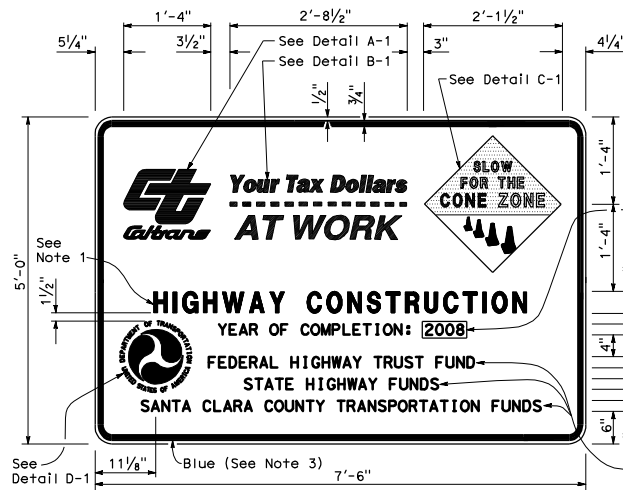
2006 REVISED STANDARD PLAN RSP P18

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

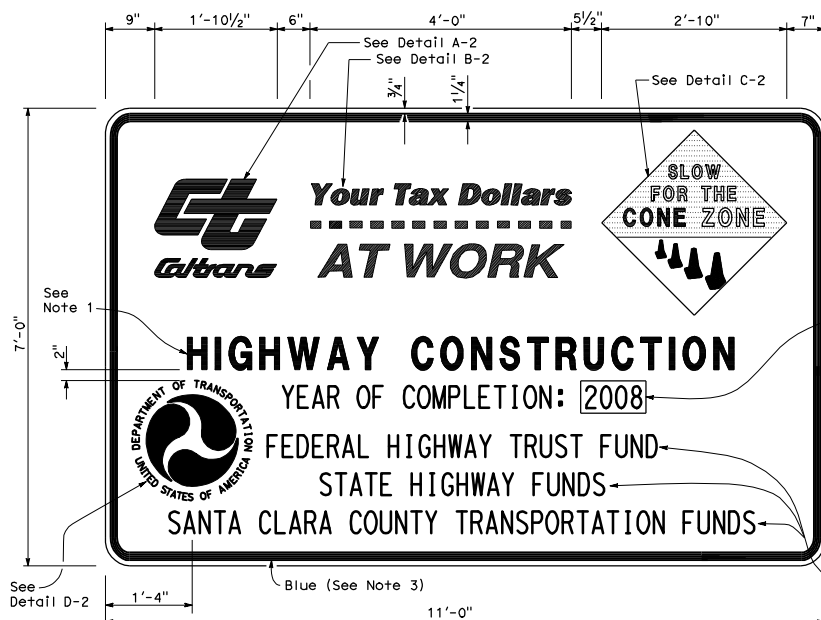
Greg N. Edwards
 REGISTERED CIVIL ENGINEER
 November 17, 2006
 PLANS APPROVAL DATE
 No. C36386
 Exp. 6-30-08
 CIVIL
 STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

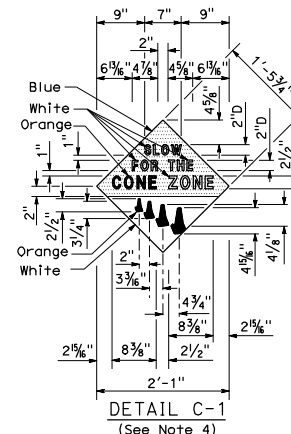
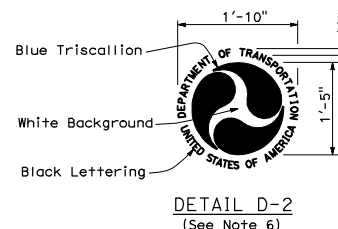
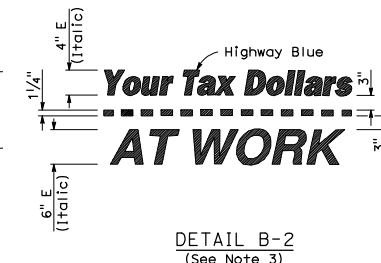
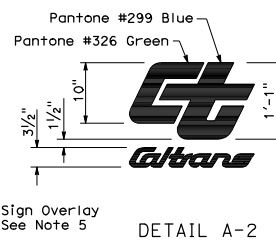
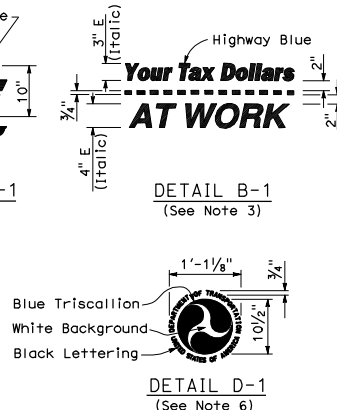
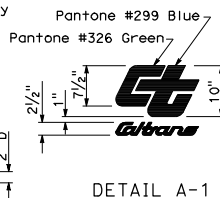
To accompany plans dated _____



TYPE 1

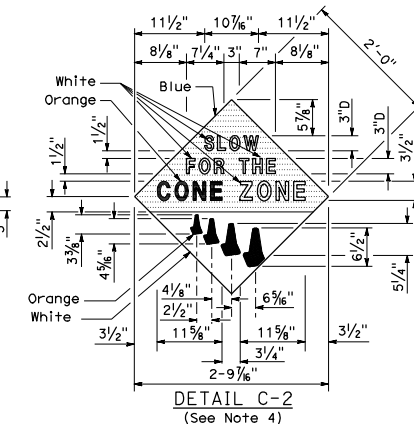


TYPE 2



NOTES:

1. The sign messages shown for type of project and fund types are examples only. See the Special Provisions for the applicable type of project and fund type messages to be used.
2. Except as otherwise shown, the legend of sign shall be black on a white background (non-reflective).
3. The border of the signs and details "B-1" and "B-2" shall be blue (non-reflective).
4. The diamond in details "C-1" and "C-2" shall be blue for the background of message, "SLOW FOR THE CONE ZONE", and white background for the orange cones. The color and type of font for the "SLOW FOR THE CONE ZONE" message shall be: "SLOW" white D; "FOR THE" white D; "CONE" orange Arial font; "ZONE" white Arial font.
5. Year of completion of project construction shown on the overlay is an example only. See the Special Provisions.
6. Use when the Project Involves Federal Highway Trust Fund.



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**CONSTRUCTION PROJECT
 FUNDING
 IDENTIFICATION SIGNS**

NO SCALE

RSP T7 DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN T7
 DATED MAY 1, 2006 - PAGE 217 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T7